



Ficus geocarpa (Moraceae): A new record for India from Arunachal Pradesh

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Abstract

Ficus geocarpa Teijsm. ex Miq., so far known from Malesia, is reported here as a new record for India from Papumpare District, Arunachal Pradesh. Detailed description of the species with photographs are provided here to authenticate the record.

Keywords: Arunachal Pradesh, *Ficus geocarpa*, India, new record

Introduction

Ficus is one of the largest genera of angiosperms, with about 750 species of terrestrial trees, shrubs, hemi-epiphytes, climbers and creepers occurring in the tropics and subtropics of the world (Berg & Corner, 2005; Ronsted *et al.*, 2008; Frodin, 2004). *Ficus* is represented by 115 taxa in India, with the maximum species richness (*c.* 61 spp.) in the Northeast India (Chaudhary *et al.*, 2012). While working on floristic diversity of Moraceae in the eastern Himalayan state of Arunachal Pradesh, authors have collected more than 40 species of *Ficus*. One of the specimens collected from Doimukh area in Papumpare district found to be rare and quite distinct from the other Indian species. On examining this specimen, using the publications of King (1887-1888), Berg (2004) and Berg & Corner (2005) it is identified as *Ficus geocarpa* Teijsm. ex Miq. belonging to the subgenus *Sycomorus* and the section *Sycocarpus*. Subsequent thorough scrutiny of relevant literature (Berg & Nannapat, 2011; Chaudhary *et al.*, 2012; Corner, 1965; Giri *et al.*, 2008; Grierson & Long 1983; Haridasan & Rao 1987; Kanjilal *et al.*, 1940; King, 1888; Wu *et al.*, 2003) and herbarium specimens at CAL, ASSAM, ARUN and State Forest Research Institute, Itanagar (APFH) revealed that this species was not recorded from India so far. *F. geocarpa* was originally described from Malesia and till present known only from that country. Therefore this paper reports the first authentic record of this species from India and is an addition to the Indian flora. The species is described in detail with a color photoplate to facilitate easy identification.

Ficus geocarpa Teijsm. ex Miq., Ann. Mus. Bot. Lugduno-Batavi 3: 231. 1867; King G., Ann. Roy. Bot. Gard., Calcutta 1:102 t.135.1887; Corner, Gard. Bull. Singapore 21 (1): 91. 1965; Berg & Corner, Fl. Males., Ser. 1, Spermat. 17(2): 423. 2005. **Fig. 1**

Trees, up to 10 m tall, dioecious, evergreen; branchlets pubescent; trichomes 3–6 mm thick, soft; internodes hollow; bark smooth, pale brown. Leaves simple, distichous, slightly asymmetric, oblong to sub-ovate, 15–36 × 5–13 cm, rounded to sub-cordate at the narrow side and cordate at the broad side at base, denticulate to dentate at margin, acuminate at apex; strigose on the upper side, brown or brownish hirsute on the lower side; longer stiff hairs intermixed with shorter and softer white hairs; midrib hirtellous; cystoliths only beneath; basal nerves 3–5 pairs, prominent; wax glands present in the axils of a few middle and basal lateral nerves of the lamina; lateral nerves 6–10 (–12) pairs; tertiary nerves faintly reticulate on upper part of the lamina; petiole 0.5–2 cm long, brown- hirsute, longer stiff hairs intermixed with shorter and softer white hairs; stipules 2–4 cm long, white puberulous to subsericeous, partly brown (on the keel), strigose to hirsute, caducous. Figs flagelliflorous, branches hispid 1.5–3 m long, internodes 4–5 cm long, arising from the base of the trunk. Receptacles paired, pyriform, depressed-globose to turbinate, 1.5–1.8 cm across, covered with dense brown tomentum, ribbed towards the ostiole, apex concave, brownish- red to yellow at maturity; fig wall 3–4 mm thick; peduncle stout,

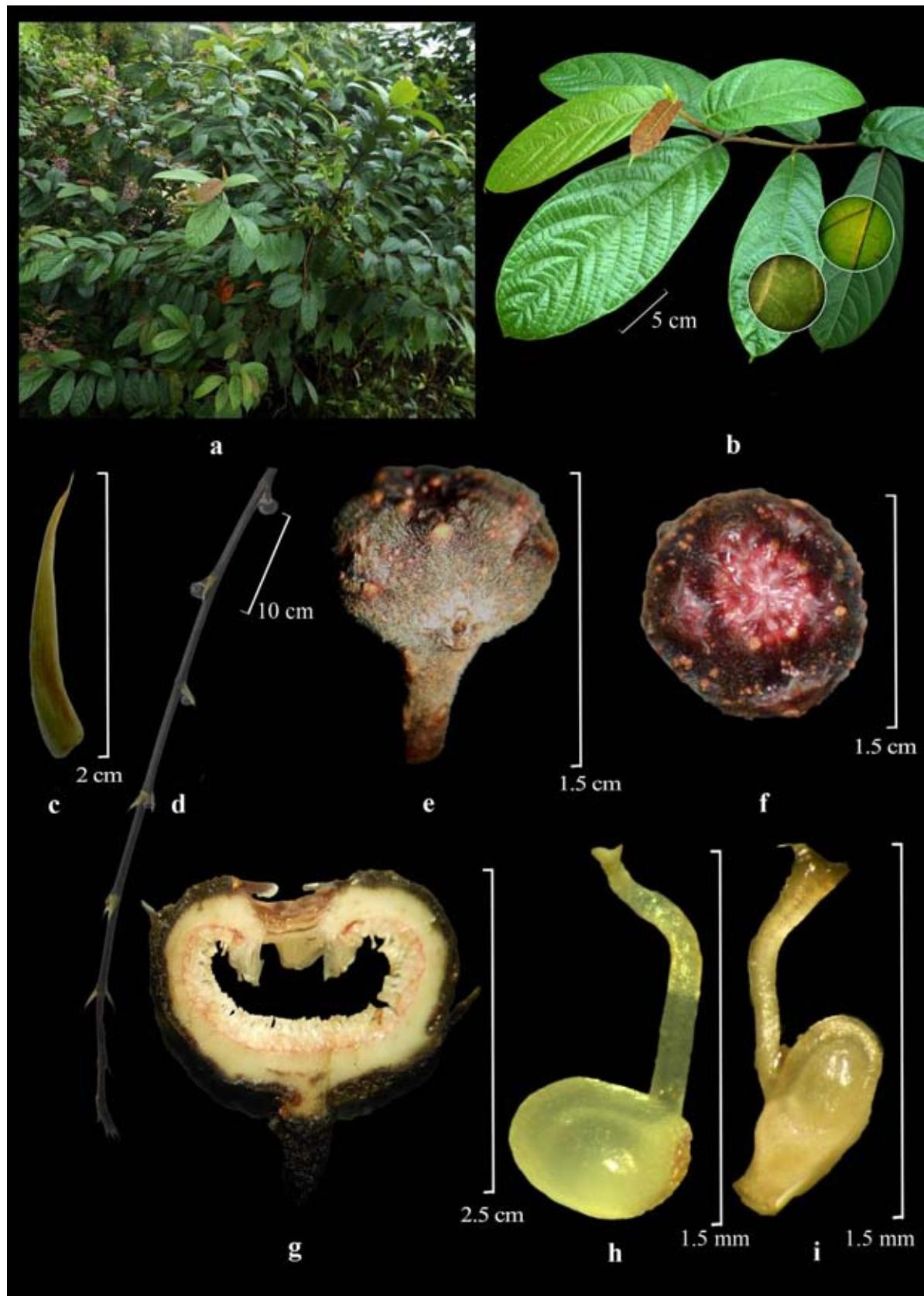


Fig. 1. *Ficus geocarpa* Teijsm. ex Miq. **a.** Habit; **b.** Leafy twig with adaxial and abaxial surfaces; **c.** Stipule; **d.** Fig - bearing branch; **e.** Receptacle; **f.** Receptacle (Front view); **g.** Receptacle (L.S); **h-i.** Female flowers.

pubescent, 0.7–1.2 × 0.2–3 cm, peduncular bracts 3–4, caducous; basal bracts 2–3, 2–3 mm long; ostiole c. 2 mm across; ostiolar bracts 5–6, reddish pink; 10–15 whitish dots near the ostiole and at base of the fig; interfloral bracts absent. Fertile female flowers without perianth; style twice as long as the ovary, 1.5–2 mm long, lateral; stigma clavate. Mature achenes rhomboid, minutely tuberculate.

Flowering & Fruiting: August – January.

Distribution: Western and Central Malesia (Celebes, Java), India (Arunachal Pradesh).

Ecology: Found growing in the moist deciduous tropical forest in a shaded area on the hill slope at c. 150 m above sea level. Only a few individuals are noticed in the population, confined to a small area near road side at Doimukh of Papumpare district.

Specimen examined: INDIA, Arunachal Pradesh, Papumpare district, Doimukh at 200 m, 25.08.2012, Rubul Buragohain 824 (ARUN).

Notes: As the occurrence of the species is found in highly disturbed area and the only known population is with few individuals, the species could fall under threatened category. Further explorations may throw more light on the threat status. This species deserves special conservation efforts and the authors have initiated the vegetative propagation of the species in the NERIST campus, Nijuli, Arunachal Pradesh.

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